

Amendments to the Claims

- At the time of the Action: Claims 16-23 and 25-58.
- Canceled Claims: Claims 17-22, 25-28 and 43-58.
- Previously Canceled Claims: Claim 24.
- Amended Claims: Claims 16 and 23.
- After this Response: Claims 16, 23 and 29-42.

16. (Currently Amended) A web content adaptation method comprising: analyzing one or more functions associated with a webpage that is configured for presentation on a first device type, said the analyzing being performed by generating one or more function-based object models that represent objects comprising the webpage,

said the objects comprising:

one or more basic objects associated with the webpage, basic objects comprising a smallest information body that cannot be further divided, said the one or more basic objects being configured to perform one or more of the following functions: (1) providing semantic information, (2) navigating to other objects, (3) providing a visual effect on the webpage, and (4) enabling user interaction; and

one or more composite objects associated with the webpage, composite objects comprising objects that contain other objects, said the one or more composite objects having a clustering function that is associated with a webpage author's intention; [[and]]

the generating of the one or more function-based object models comprising generating at least one function-based object

model for a basic object. the at least one function-based object model being generated as a function of one or more of the following properties: (1) a presentation property that defines a way in which the object is presented, (2) a semantic property associated with content of an object, (3) a decoration property pertaining to an extent to which the basic objects serves to decorate the webpage, (4) a hyperlink property pertaining to an object to which the basic object points via a hyperlink, and (5) a interaction property pertaining to an interaction method of the basic object;

the generating at least one function-based object model for a composite object, said at least one function-based object model for the composite object being generated as a function of one or more of the following properties: (1) a clustering relationship property pertaining to a relationship among root children of the composite object, and (2) a presentation relationship property pertaining to a presentation order associated with the root children of the composite object;

the generating further comprising generating at least one specific function-based object model that serves to categorize an object by:

for a basic object. generating the at least one specific function-based object model based upon properties of the basic object and properties associated with any father or brother objects; and

for a composite object, generating the at least one specific function-based object model based upon properties of the composite object and any of its root children; and
based on said the analyzing, adapting the webpage for presentation on a second device type that is different from the first device type.

17. (Canceled).

18. (Canceled).

19. (Canceled).

20. (Canceled).

21. (Canceled).

22. (Canceled).

23. (Currently Amended) The method of claim [[20]] 16, wherein said generating of said at least one specific function-based object model comprises using a rule-based decision tree to ascertain a category of an object.

24. (Previously Canceled).

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed by one or more processors, cause the one or more processors to:

analyze one or more functions associated with a webpage that is configured for presentation on a first device type by generating one or more function-based object models that represent objects comprising the webpage,

said objects comprising:

one or more basic objects associated with the webpage, basic objects comprising a smallest information body that cannot be further divided, said one or more basic objects being configured to perform one or more of the following functions: (1) providing semantic information, (2) navigating to other objects, (3) providing a visual effect on the webpage, and (4) enabling user interaction; and

one or more composite objects associated with the webpage, composite objects comprising objects that contain other objects, said one or more composite objects having a clustering function that is associated with a webpage author's intention;

said generating of the one or more function-based object models comprising generating at least one function-based object model for a basic object, said at least one function-based object model being generated as a function of one or more of the following properties: (1) a presentation property that defines a way in which the object is presented, (2) a semantic property associated with content of an object, (3) a decoration property pertaining to an extent to which the basic objects serves to decorate the webpage, (4) a hyperlink property pertaining to an object to which the basic object points via a hyperlink, and (5) a interaction property pertaining to an interaction method of the basic object;

 said generating further comprising generating at least one function-based object model for a composite object, said at least one function-based object model for the composite object being generated as a function of one or more of the following properties: (1) a clustering relationship property pertaining to a relationship among root children of the composite object, and (2) a presentation relationship property pertaining to a presentation order associated with the root children of the composite object;

 said generating further comprising generating at least one specific function-based object model that serves to categorize an object by:

 for a basic object, generating said at least one specific function-based object model based upon properties of the basic object and properties associated with any father or brother objects; and

 for a composite object, generating said at least one specific function-based object model based upon properties of the composite object and any of its root children; and

based upon an analysis of said one or more functions, adapt the webpage for presentation on a second device type that is different from the first device type.

30. (Previously Presented) The one or more computer-readable storage media of claim 29, wherein said instructions cause the one or more processors to adapt the webpage for presentation on a WAP (Wireless Application Protocol)-enabled device.

31. (Previously Presented) A web content adaptation method comprising:

receiving multiple web pages that are configured for display on a first device type;

processing the multiple web pages to provide multiple different objects associated with the webpages, wherein the objects are classified according to the number of component objects an individual object contains, and wherein the individual object has one or more properties that relates to the one or more functions of the individual object; and

applying one or more rules to the objects sufficient to provide multiple different webpages that are configured for display on a second device type that is different from the first device type.

32. (Original) The method of claim 31, wherein the individual objects can have a presentation property that defines a way in which the object is presented.

33. (Original) The method of claim 31, wherein the individual objects can have a semanteme property associated with the content of an object.

34. (Original) The method of claim 31, wherein the individual objects can have a decoration property pertaining to the extent to which an object serves to decorate a webpage.

35. (Original) The method of claim 31, wherein the individual objects can have a hyperlink property pertaining to an object to which another object points via a hyperlink.

36. (Original) The method of claim 31, wherein the individual objects can have a interaction property pertaining to an interaction method of an object.

37. (Original) The method of claim 31, wherein the individual objects can have a clustering relationship property pertaining to a relationship among any root children of an object.

38. (Original) The method of claim 31, wherein the individual objects can have a presentation relationship property pertaining to a presentation order associated with any root children of an object.

39. (Original) The method of claim 31, wherein said processing comprises defining a representation of an object that includes any children of said object.

40. (Original) The method of claim 31, wherein said processing comprises assigning a category to one or more objects.

41. (Original) The method of claim 40, wherein said assigning comprises using a rule-based decision tree to ascertain a category for said one or more objects.

42. (Original) The method of claim 40, wherein said assigning comprises assigning a category from a set of object categories comprising: (1) an information object that presents content information, (2) a navigation object that provides a navigation function, (3) an interaction object that provides for user interaction, (4) a decoration object that serves a decoration function, (5) a special function object that performs a defined function, and (6) a page object that is associated with presentation of related information.

43.-58. (Canceled).